



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

April 13, 2017

Mr. Gary Ridenour, Plant Manager
Rust-Oleum Corporation
113 Olive Street
Attleboro, MA 02703

RE: Attleboro
Transmittal No.: X271748
Application No.: SE-17-003
Class: NM99
FMF No.: 130167
AIR QUALITY PLAN APPROVAL

Dear Mr. Ridenour:

The Massachusetts Department of Environmental Protection ("MassDEP"), Bureau of Air and Waste, has reviewed your Limited Plan Application ("Application") listed above. This Application concerns the proposed construction and operation of shellac-based BIN line of coatings at your manufacturing facility located at 113 Olive Street in Attleboro, Massachusetts ("Facility").

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 "Air Pollution Control" regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-O, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP's review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner/operator ("Permittee") must comply in order for the Facility to be operated in compliance with this Plan Approval.

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

TTY# MassRelay Service 1-800-439-2370

MassDEP Website: www.mass.gov/dep

Printed on Recycled Paper

1. DESCRIPTION OF FACILITY AND APPLICATION

The Permittee manufactures shellac, coatings, and spackling compounds. The Facility operates in accordance with MassDEP Conditional Approval No. 4P08046, Transmittal No. X007534, dated February 11, 2009, and MassDEP Air Quality Plan Approval No. SE-16-022, Transmittal No. X272910, dated January 27, 2017.

In this Application (SE-17-003), the Permittee requests to install and operate a new production line to manufacture a shellac-based BIN line of coatings, now identified as Emission Unit (EU) BIN. The EU BIN consists of a bulk storage tank, five (5) blending tanks and three (3) filling lines. As a denatured alcohol blend is added to the bulk storage tank, and the product is transferred to the filling line, Volatile Organic Compound (VOC) emissions occur through working and breathing losses. As raw materials are added to the master cutting tank and the product is transferred to the filling line, VOC emissions occur through vapor displacement.

This Approval establishes operational/production and emission limits for the new BIN production line, and re-establishes Facility-wide VOC emission limits.

The Permittee has indicated that the Facility is subject to 40 Code of Federal Regulation Part 63, Subpart CCCCCC, National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Area Source Standards for Paints and Allied Products Manufacturing. As of this date, the MassDEP has not accepted delegation of authority for this Subpart for non-Operating Permit (310 Code of Massachusetts Regulation, Appendix C) sources. You are advised to consult with United States Environmental Protection Agency regarding applicability of this Subpart to your facility, including any notification, recordkeeping, reporting, monitoring, and testing requirements for which you may be subject to. The address is: U.S. Environmental Protection Agency, New England, Region 1, 5 Post Office Square, Suite 100, Mail Code OES04-2, Boston, MA, 02109-3912.

The Permittee shall achieve Best Available Control Technology through the following measures:

- All material transfers are accomplished by hard piping, not by manual transfers.
- All mixing tanks are equipped with permanent, tightly fitting covers with minimum shaft clearance.
- Limit the VOC content in BIN production as contained in 310 CMR 7.25 Best Available Controls for Consumer and Commercial Products.

2. EMISSION UNIT (EU) IDENTIFICATION

Each Emission Unit (EU) identified in Table 1 is subject to and regulated by this Plan Approval:

| Table 1 | | | |
|---------|--|--|--------------------------------|
| EU | Description | Nominal Design Capacity | Pollution Control Device (PCD) |
| BIN | Bulk Storage Tank DG Marshall Blending Tanks Filling Lines | Storage Tank 20,000 gallons Blending Tanks: 2,500 gallons Filling Lines: 20 gallons per minute | none |

Table 1 Key:

EU = Emission Unit Number

PCD = Pollution Control Device

3. APPLICABLE REQUIREMENTS

A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2:

| Table 2 | | | |
|---------|---|-----------------|---|
| EU | Operational / Production Limit | Air Contaminant | Emission Limit ¹ |
| BIN | 1. 187,500 gallons of BIN production per month. | VOC | 0.4 TPM 2.7 TPY |
| | 2. 1,500,000 gallons on BIN production per consecutive 12-month period. | | 730 grams of VOC per liter of Clear Shellac ² 550 grams of VOC per liter of Opaque Shellac ² |

Table 2 Key:

EU = Emission Unit Number

n/a = not applicable

USEPA = United States Environmental Protection Agency

VOC = Volatile Organic Compounds

TPM = tons per month

TPY = tons per consecutive 12-month period

CMR = Code of Massachusetts Regulations

Table 2 notes:

1. Emission Limits for EU BIN represent the sum of worst case (Product 1055ZF, Bulls Eye Shellac) vapor displacement emissions and bulk storage losses. Vapor displacement emissions were calculated using equations from the *Emission Inventory Improvement Program's (EIIP) Methods for Estimating Air Emissions from Chemical Manufacturing Facilities (August 2007) – Section 3.1.1, Charging to an Empty Vessel*. The worst case vapor displacement was calculated to be 7.82 pounds per 2,500 gallon batch. Emissions from the bulk storage tank was evaluated using USEPA's TANKS Emissions Estimation Software, Version 4.09D, which is based on the emission estimation procedures from Chapter 7 of USEPA's *Compilation Of Air Pollutant Emission Factors (AP-42)*. The bulk storage tank loss was calculated to be 0.36 TPY for any BIN product combination, and was based upon an annual throughput of 1,200,000 gallon (comprised of 95% ethanol and 5% isopropanol). See Table 6, Special Terms and Conditions, Proviso No. 3. The production limits proposed by the Applicant correlate with the calculated emission limits, and with the proposed operation of the process equipment.
2. As contained in 310 CMR 7.25(11), Architectural and Industrial Maintenance (AIM) Coatings.

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5:

| Table 3 | |
|----------------|---|
| EU | Monitoring and Testing Requirements |
| BIN | 1. The Permittee shall monitor daily the amount (in gallons) of BIN product filled. |
| Facility-wide | 2. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration. |
| | 3. If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and Regulation 310 CMR 7.13. |

Table 3 Key:

USEPA = United States Environmental Protection Agency

CMR = Code of Massachusetts Regulations
EU = Emission Unit Number

| Table 4 | |
|---------------|---|
| EU | Record Keeping Requirements |
| BIN | 1. The Permittee shall maintain a daily record of gallons of BIN product filled. |
| Facility-wide | 2. The Permittee shall maintain adequate records on-site to demonstrate compliance with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve-month period (current month plus prior eleven months). These records shall be compiled no later than the 15 th day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping . |
| | 3. The Permittee shall maintain records of monitoring and testing as required by Table 3. |
| | 4. The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP for the EU approved herein on-site. |
| | 5. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU, and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed. |
| | 6. The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation. |
| | 7. The Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration. |
| | 8. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years. |
| | 9. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request. |

Table 4 Key:

SOMP = Standard Operating and Maintenance Procedure
MassDEP = Massachusetts Department of Environmental Protection

USEPA = United States Environmental Protection Agency
CMR = Code of Massachusetts Regulations
EU = Emission Unit Number

| Table 5 | |
|----------------|--|
| EU | Reporting Requirements |
| Facility-wide | 1. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a “Responsible Official” as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c). |
| | 2. The Permittee shall notify the Southeast Regional Office of MassDEP, BAW Permit Chief by telephone: 508-946-2817, or email: SERO.Air@massmail.state.ma.us, as soon as possible, but no later than three (3) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted to the Permit Chief at MassDEP within ten (10) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s). |
| | 3. The Permittee shall report to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form. The Permittee shall note therein any minor changes (under 310 CMR 7.02(2)(e), 7.03, 7.26, etc.), which did not require Plan Approval. |
| | 4. The Permittee shall provide a copy to MassDEP of any record required to be maintained by this Plan Approval within 30 days from MassDEP’s request. |
| | 5. The Permittee shall submit to MassDEP for approval a stack emission pretest protocol, at least 30 days prior to emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements. |
| | 6. The Permittee shall submit to MassDEP a final stack emission test results report, within 45 days after emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements. |

Table 5 Key:

EU = Emission Unit Number
BAW = Bureau of Air and Waste

MassDEP = Massachusetts Department of
Environmental Protection

4. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to, and shall comply with, the following special terms and conditions:

- A. The Permittee is subject to and shall comply with the Special Terms and Conditions as contained in Table 6:

| Table 6 | |
|----------------|---|
| EU | Special Terms and Conditions |
| BIN | 1. All material transfers shall be accomplished by hard piping, not by manual transfers. |
| | 2. All mixing tanks shall be equipped with permanent, tightly fitting covers with minimum shaft clearance. |
| | 3. The VOC content in BIN production shall be restricted to the limits contained in 310 CMR 7.25 <u>Best Available Controls for Consumer and Commercial Products</u> . |
| Facility-wide | 4. Any prior Plan Approvals issued under 310 CMR 7.02 shall remain in effect unless specifically changed or superseded by this Plan Approval. See Section 1 of this Plan Approval. The Facility shall not exceed the emission limits and shall comply with approved conditions specified in the prior Plan Approval(s) unless specifically altered by this Plan Approval. |

Table 6 Key:

EU = Emission Unit Number

TPY = tons per consecutive 12-month period

TPM = tons per month

CMR = Commonwealth of Massachusetts
Regulations

VOC = Volatile Organic Compounds

- B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including but not limited to rain protection devices known as “shanty caps” and “egg beaters.”
- C. The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7, for the Emission Units that are regulated by this Plan Approval:

| Table 7 | | | | |
|----------------|---|---|--|--|
| EU | Stack Height Above Ground (feet) | Stack Inside Exit Dimension (feet) | Stack Gas Exit Velocity Range (feet per second) | Stack Gas Exit Temperature Range (°F) |
| BIN | General Ventilation | | | |

Table 7 Key:

EU = Emission Unit Number

°F = Degree Fahrenheit

5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

- A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).
- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.
- F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.

- J. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain “Fail-Safe Provisions,” which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Enclosed is a stamped approved copy of the application submittal.

Should you have any questions concerning this Plan Approval, please contact Dan Kamieniecki by telephone at (508) 946-2717, or in writing at the letterhead address.

This final document copy is being provided to you electronically by the
Department of Environmental Protection. A signed copy of this document
is on file at the DEP office listed on the letterhead.

Thomas Cushing
Chief, Air Quality Permitting
Bureau of Air and Waste

Enclosure

ecc: Attleboro Local Board of Health/Dept of Health
Attleboro Fire Department
MassDEP/Boston – Y.Tian
MassDEP/SERO – M. Pinaud
Rust-Oleum Corp. - A. Ferri
Ramboll Environ – A. Kao